ILLINOIS DENTAL JOURNAL

volume 20 number 9 september 1951

Fourth Annual Caravan Meetings
See Page 406

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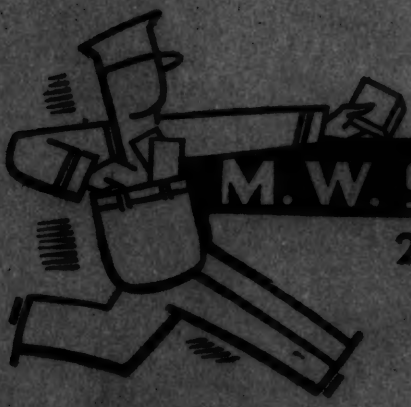

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Illinois State Dental Society Caravan Meetings -- 195

(Arranged by the Study Club Committee)

Dr. Ross H. Bradley, Chairman

District	*Date*	*City*	*Local Chairman*	*Councilman*
Southern	Monday, Sept. 24	Collinsville	C. W. Harrison	Gordon A. Smith
Central Western	Tuesday, Sept. 25	Springfield	Joseph V. Link	R. H. Fell
Central	Wednesday, Sept. 26	Peoria	Phil L. Chain	Wilfred S. Peters
Central Eastern	Monday, Oct. 1	Danville	Joseph G. Hancock	H. A. Hindman
Northeastern	Tuesday, Oct. 2	Kankakee	John A. Zwisler	F. W. Graham, Jr.
Northwestern	Wednesday, Oct. 3	Rockford	Stuart O. Sowle	Fred M. Helpenste

PROGRAM

2:30 P.M.

Joseph Laffler, Assistant Professor of Clinical Oral Surgery, Washington University, St. Louis, Missouri. Dr. Laffler is a member of the American Society of Oral Surgeons and Fellow of International College of Dentists.

SUBJECT: Oral Surgery for the General Practitioner.
Dr. Laffler will stress the importance of mouth preparation for full dentures.

3:30 P.M.

Phillip G.Vierheller, Lecturer in Full Upper and Lower Denture Prosthesis at Washington University, St. Louis, Missouri, Member of the American Dentists Society and Fellow of International College of Dentists. Dr. Vierheller has practiced in St. Louis since 1929.

SUBJECT: Full Denture Construction.
Dr. Vierheller will present a practical impression technic stressing the importance of anatomical structures in forming the denture periphery and other steps leading to the completed denture.

6:00 P.M. — Dinner

7:00 P.M. — Evening Program

President Walter J. Gonwa and President-elect Melford E. Zinser will make short talks following the dinner.

Robert G. Kesel, Professor and Head of the Department of Therapeutics and Materia Medica, College of Dentistry, University of Illinois; Past President of the Illinois State Dental Society; Winner of the Chicago Dental Society Essay Award for Reports on Research in Etiology and Prevention of Caries—1946; Past President and Secretary of the Odontographic Society of Chicago; Past President American Association of Endodontists and Chicago Chapter of International Association for Dental Research; Member of American Academy of Periodontology and author of numerous scientific papers.

SUBJECT: Fluoridation of City Water Supplies.

Rampant Caries

its clinical management †

by Maury Massler, D.D.S., M.S.*
and
Jack D. Zwemer, D.D.S.

INTRODUCTION

Rampant caries has always been a disheartening problem to the dentist—and his patient. The best efforts of both have, in the past, too often failed to control this disease. The numerous visits and tedious chair hours necessary for the time-consuming and often unsuccessful multiple restorations have thus seemed futile to both the patient and the dentist. The economic load has made the problem seem even more hopeless.

Recent advances in caries control technics have changed this hopeless picture to a hopeful one. Caries can be controlled—even rampant caries. Twenty years ago the treatment of rampant decay was hopeless. Restorations could not keep up with the rapid progress of the disease. Today it is possible to slow down or even to halt the rapid progress of destruction so that restorations can keep pace and preserve the teeth.

The successful management of the rampant caries case is a challenge to the knowledge of the operator. It can well be a financial asset and a practice builder rather than the liability it was a decade ago.

Epidemiology of Rampant Caries

Definition. Rampant caries is "a suddenly appearing, widespread, rapidly burrowing type of caries resulting in early involvement of the pulp and affecting those teeth or dental surfaces usually regarded as immune to ordinary decay" (Massler, 1945).

Rampant caries must be distinguished from ordinary *extensive* caries resulting from neglect. Rampant caries often occurs in relatively clean mouths and can therefore be distinguished from the more commonly encountered

† *From the Division of Graduate Pedodontics, University of Illinois, College of Dentistry, Chicago.*

* *Professor of Graduate Pedodontics.*

neglected caries by the amount of materia alba and debris present in the latter. The most distinguishing character of rampant caries is the fact that tooth surfaces ordinarily immune to decay (proximal surfaces of the lower anterior teeth; cervical areas of the anterior teeth) are affected (Massler, 1945).

mitted to become extensive, the upper anterior teeth may become involved proximally. The lower anterior teeth are, however, relatively immune to caries and are very seldom affected. When the lower anterior teeth are involved, the disease is said to be rampant.

In the permanent dentition, the pattern of caries attack is very similar

TABLE 1
ORDER OF SUSCEPTIBILITY OF TEETH TO DENTAL CARIES*

	Teeth Affected	Approximate Average Percentage Caries Experience (at Six Years Post-eruptive Age)
Class I	$\frac{6}{}$	66%
	$\frac{}{7}$	59%
Class II	6	52%
	$\frac{7}{}$	50%
Class III	5	20%
	$\frac{}{5}$	17%
	2	17%
	$\frac{}{1}$	15%
	$\frac{}{4}$	15%
Class IV	3	5.5%
	$\frac{}{4}$	3.5%
Class V	$\frac{2}{}$	1.7%
	$\frac{}{1}$	1.2%
	$\frac{}{3}$	0.4%

* *From Klein and Palmer,* 1941

Distribution

Teeth Affected. In the primary dentition, the usual sequence of the caries attack is as follows: lower molars, upper molars, upper anteriors and (seldom) the lower anteriors. In simple, ordinary caries, the molars are attacked occlusally and proximally. In children who are highly susceptible to decay and in whom the caries is per-

(Knutson, Klein, and Palmer, 1938). The order of attack is usually (1) lower molars, (2) upper molars, (3) bicuspids and (4) upper anteriors. The lower anterior teeth are usually caries immune. Caries is said to be rampant in the permanent dentition when the lower anterior teeth become involved (Fig. 1; Table 1).

Surfaces Affected. The progress of caries on the individual tooth also fol-

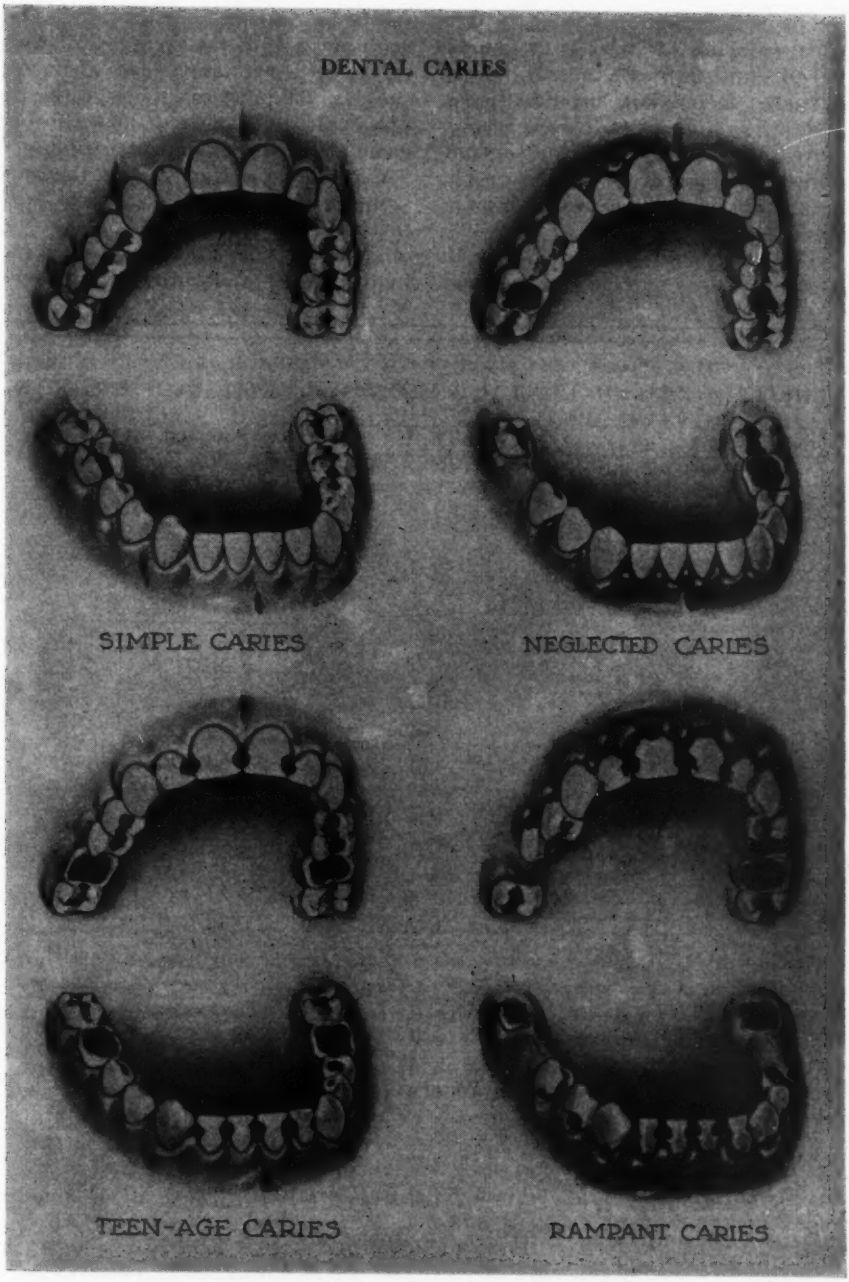

FIGURE 1. *Clinical Appearance of Various Types of Dental Caries*

lows a definite pattern (Table 2). The usual sequence of attack is as follows: (1) pits and fissures (occlusal, buccal, palatal), (2) proximal (contact) areas, and (3) cervical areas (Noyes, Schour, Noyes, 1938). Under ordinary circumstances, the ratio of pit and fissure caries to proximal and cervical caries is 8:4:1.

The pattern of caries progress as it is seen in the "average" person may not be followed in rampant caries. The cervical areas of the teeth may be attacked with greater violence than are the occlusal surfaces. The ratio of proximal to fissure decay may also become reversed in rampant caries.

Cervical caries is most often the consequence of excessive sugar intake, particularly between meals. It is seen often in teen-age children and not infrequently in adults who are exposed

TABLE 2

THE PROGRESS OF DENTAL CARIES BY TEETH AND SURFACES

* Classification		Teeth Affected	Surfaces Affected Occlusal	Proximal	Cervical
Class I:	Very Mild Caries (Molar Caries)	$\overline{6\ 7}$	+		
Class II:	Mild Caries (Ordinary Caries)	$\overline{6\ 7}$	++	+	
		6 7	+		
Class III:	Moderate Caries (Upper Incisor Caries)	$\overline{6\ 7}$	++	++	
		6 7	++	+	
		$\overline{4\ 5}$	+	+	
		$\overline{5}$			
		1 2		+	
Class IV:	Severe Caries (Extensive Caries)	$\overline{6\ 7}$	+++	+++	+
		6 7	+++	++	
		$\overline{4\ 5}$	++	++	+
		$\overline{5}$			
		1 2 3		++	+
		$\overline{4}$	+	++	
Class V:	Very Severe Caries (Rampant Caries)	$\overline{6\ 7}$	+++	+++	++
		6 7	+++	+++	+
		$\overline{4\ 5}$	+++	+++	++
		$\overline{5}$			
		1 2 3		+++	++
		$\overline{4}$	++	+++	++
		$\overline{1\ 2\ 3}$		+++	++

* *From Klein and Palmer,* 1941

Pluses indicate extent or degree of caries on the surface affected.

to large amounts of fermentable carbohydrate foods, at frequent intervals.

Tissues Affected. Caries of the enamel and caries of the dentin are not necessarily the same. As the caries progresses through the enamel and dentin, differences in structure between these tissues change somewhat the character of the caries progress.

Rampant Enamel Caries. Caries which attacks the enamel with relatively little destruction of the dentin is not infrequently seen. This type of caries is characterized by extensive decalcification of the enamel, principally on the gingival third of the tooth spreading toward the occlusal surface and denuding the crown of enamel. In some cases the entire labial and buccal surfaces of the teeth may become affected (Fig. 2). The color of the affected enamel is typically chalky white to brown depending on the amount of destruction and the age of the lesion. The lesion feels soft to the explorer point, is often rough and pitted and is easily entered with a bur.

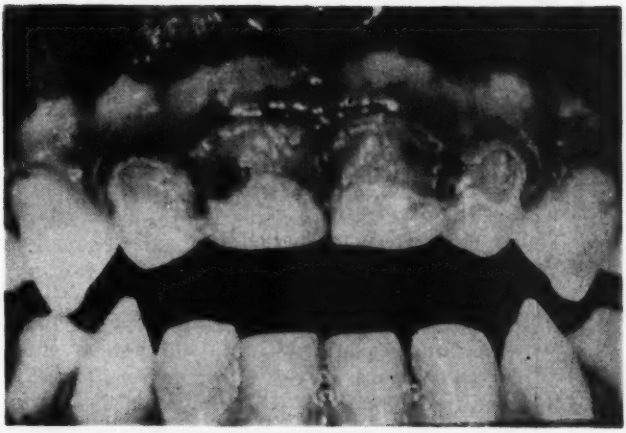

FIGURE 2. *Clinical appearance of Rampant Enamel Caries*

Rampant Dentin Caries. Caries of the dentin is characterized in the early stages by only a relatively small opening in the enamel but with rapid and extensive spread into the dentin. In the later stages open lesions may occur due to the loss of the enamel by undermining or backward decay (Gottlieb, 1947). In the early stages, the dull chalky white character of the undermined enamel is quite characteristic and easily differentiated clinically from non-carious areas.

In the *acute phase* of the disease the dentin is usually soft, brown, and necrotic. Penetration is extremely rapid. In the more slowly progressing ordinary dentin caries, the decayed dentin is dark brown and leathery or crumbly. In rampant caries, the underlying sound dentin is very sensitive when the decay is removed probably because the caries has progressed so rapidly that there has been little opportunity for normal protective mechanisms, such as secondary dentin formation or sclerotic dentin, to perform their role in pulp protection.

Combination of Rampant Enamel and Dentin Caries. Rampant enamel or dentin caries occurring as distinct entities are less frequently encountered than the combination of both.

Incidence and Prevalence

Age Incidence. Caries does not progress at a uniform rate throughout life. Periods of acute susceptibility to the disease alternate with periods of relative immunity. Acute exacerbations in caries activity are commonly seen in almost all persons at 4 to 8 years of age and at 11 to 18 years of age (Massler, 1945). The individual suceptibility of the person determines the *degree* and the *extent* of the damage but all are liable to attack during these periods of exacerbation.

Rampant caries is seen principally during the two periods of acute exacerbation in persons of high caries susceptibility. It attacks the susceptible child between the ages of 4 to 8 years, ravishing the primary dentition and occurs again in the caries susceptible teen-age (11 to 18 years) in whom it mutilates the newly acquired permanent dentition. Between 8 to 11 years there is a slight decrease in caries activity. After 30 years of age, there is a very marked decrease in caries activity so that even rampant decay slows down considerably (Hollander and Dunning, 1939; Sloman, 1941) (Fig. 3).

Prevalence. Studies on the prevalence of rampant caries in the primary dentition are scarce. Massler (1949) found that rampant caries was present in 5.0% of 2,842 children ages 14 to 17 years. Girls were more often affected by rampant caries than boys. Rampant caries had a strong predilection for the ectomorphic (slender) type of individual. Of the 143 case of rampant caries, 105 were thin, slender (ectomorphs) children; 34 were muscular (mesomorphs) and only 4 were stocky or fat children (endomorphs).

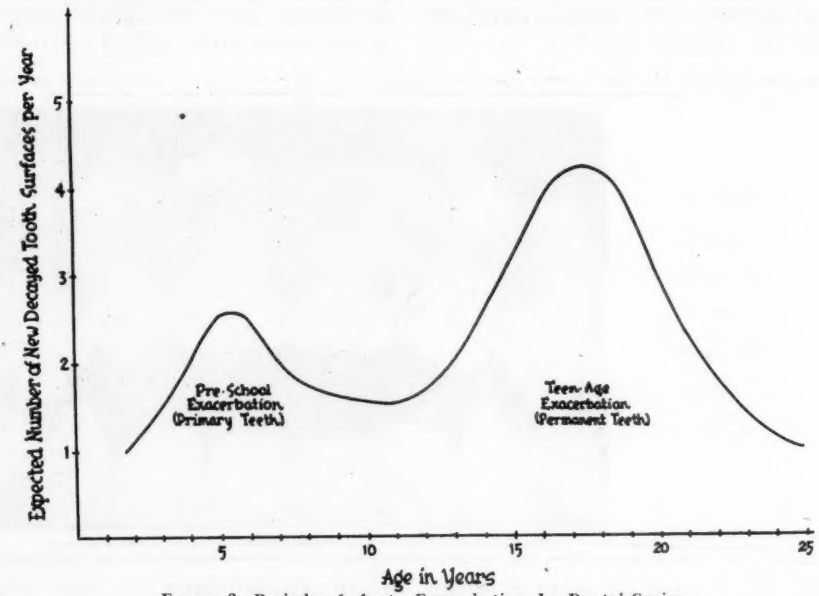

FIGURE 3. *Periods of Acute Exacerbation In Dental Caries*

Treatment of Rampant Caries

Plan of Treatment

Unless a definite plan of treatment is carefully outlined in advance, the treatment of the rampant caries case becomes tedious and unproductive. If the treatment time is not carefully budgeted, the numerous and prolonged visits are fatiguing for the patient and valuable chair time is lost by the dentist. Weary, disappointed patients break their appointments and often treatment is reduced to changing temporary fillings.

If the patient knows in advance the extent of the treatment and the dentist can show progress as the treatment unfolds, the patient is much less likely to become discouraged and lose interest in the work being done.

Length of Treatment

The treatment period for rampant caries should not exceed *ten* weeks. This period is divided into two phases. The control phase (lasting six weeks) is devoted to arresting the progress of the carious lesions already present in the mouth and to eradicating the cause of the condition. The second phase (lasting four weeks) involves the restoration of the decayed areas and prevention of the initiation of new lesions on the enamel surface (Table 3).

The Period of Control

It is discouraging to place a number of restorations only to find that new carious lesions have developed in the interim. And, it is fruitless to begin permanent restorations until the disease process has been brought under control. A period of active caries control is therefore instituted at the very outset. This will require one half-hour visit each week during the first six weeks.

Three methods of caries control can be used in the treatment of rampant caries: (1) sugar control, (2) oral hygiene, and (3) removal of active decay. The summation of all three spells success where one alone might be doomed to failure.

TABLE 3

CLINICAL MANAGEMENT OF RAMPANT CARIES

Outline of Treatment Plan

I Period of Caries Control (1 visit per week for 6 weeks)
- A. Educational Program
  - 1. Sugar Control
  - 2. Oral Hygiene
- B. Operative Program
  - 3. Removal of Active Decay

II Period of Restoration and Caries Prevention (2 visits per week for 4 weeks)
- A. Operative Program—Multiple Multiple Restorations
- B. Preventive Program—Topical Fluoride Applications

Sugar Control

Sugar and Caries. The control of the actively progressing lesion—i.e., slowing down and arresting its progress—is the primary objective of the treatment plan. Unless the attack rate is slowed down, there is no use in going further since the restorative program will break down before the violence of the caries attack.

About 1925, Bunting suggested that Lactobacillus acidophilus acting upon carbohydrates, particularly refined sug-

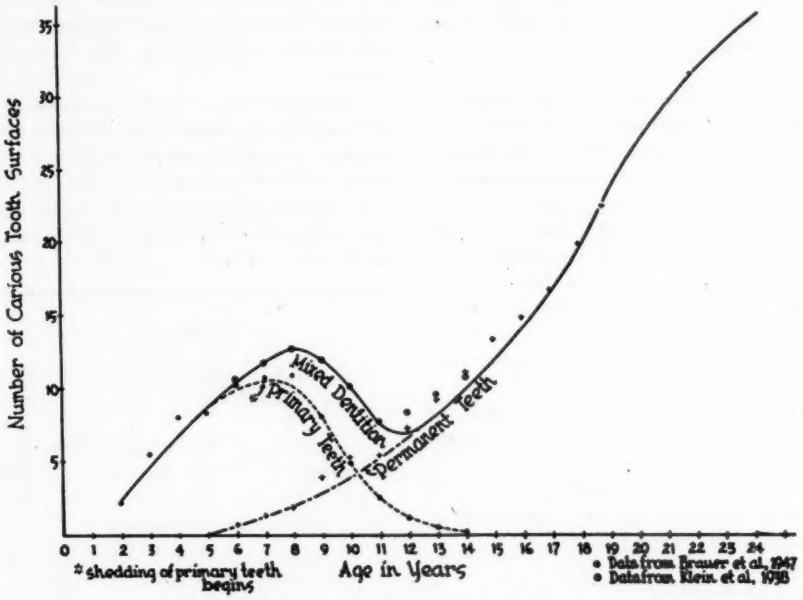
Number of Carious Tooth Surfaces
35
30
25
20
15
10
5
Mixed Dentition
Primary Teeth
Permanent Teeth
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
* shedding of primary teeth begins
Age in Years
• Data from Brauer et al, 1947
• Data from Klein et al, 1938

FIGURE 4. *Average Dental Caries Experience*

ars, were directly related to the progress of caries. He also suggested that caries activity might be reduced by the removal of the carbohydrate substrate. In 1936 Philip Jay conclusively showed that it is the fermentable or refined carbohydrate in the form of refined sugars which is primarily and most directly related to the caries process. These refined sugars are relatively simple molecules which are easily converted to lactic acid by the acidogenic flora of the mouth (Lactobacillus acidophilus; certain strains of streptococci, yeasts, etc.). The more complex starch molecules are not as readily converted to sugars (and then to lactic acid) during their stay in the mouth so there is less need to consider them as factors in caries production.

During the past decade it has been shown, time and again, that in caries active individuals the reduction of *excessive* sugar intake has resulted in a demonstrable slowing down or even arrest in the caries progress (Becks, Jensen, Millarr, 1944; Jay, 1947). In the last war these clinical observations were repeated in an almost experimental fashion upon large groups of persons living in Europe. The caries attack rates (computed from the number of carious teeth per person) showed a marked reduction which *directly paralleled the availabliity* of refined sugars to the war-torn areas of Europe (Krohn and Pedersen, 1945; Toverud, 1950). Recent reports indicate that with the advent of increased amounts of sugars to these countries (England, Sweden, Norway and Holland) the caries attack rate is steadily increasing in proportion to the sugar consumption (Sognaes, 1948; Toverud, 1949).

TABLE 4

CLINICAL MANAGEMENT OF RAMPANT CARIES

Treatment Plan

Appointments	Education Program		Chair Program
	Assistant	Dentist	
First Visit	Secure a. History b. Height c. Weight d. Intra-oral x-rays	Talk with patient a. Sugar and caries b. Oral hygiene c. Instruction for diet history d. Instruction for two saliva samples for that week	Photographs Prophylaxis Relieve pain Remove obvious decay and fill with sedative paste (ZnO and eugenol) (Avoid extractions if possible)
Second Visit	Tape Recording on "sugar and caries" and "oral hygiene and caries"*	a. Check for L. A. count b. Diet analysis and correction c. Fee schedule	Impressions for study models Remove caries from one entire quadrant
Third Visit	a. Toothbrush drill b. Check L. A. count c. Check on diet*		Remove caries from second quadrant Examine for home care of teeth Check L. A. count
Fourth and Fifth Visit	a. Toothbrush drill b. Check L. A. count c. Check on diet*		Remove caries from third and fourth quadrants
Sixth Visit		Check entire progress and decide whether to proceed with treatment.	Check oral hygiene, L. A. count and diet. Plan and begin restorations or dismiss patient.
Seventh Week	*Prevention* Prophylaxis and topical fluoride applications**		*Restoration* Multiple inlay or amalgam restorations
Eighth to Tenth Weeks		Completion	

*To be carried out by dental assistant while waiting for the dentist. Assistant makes appointment with patient for 10 minutes before chair time.

**Can be carried out by dental hygienist.

There is a striking parallelism and correlation when one plots the annual sugar consumption and the arverage caries attack rates in the various countries of the world. The United States leads the world in sugar consumption and also in the number of carious teeth per person. Italy shows the lowest annual sugar consumption and its peoples enjoy practical immunity from dental decay. Countries such as England, Sweden, Norway, Holland and others range between these two extremes. The direct relation between annual sugar consumption and caries attack rates is striking (Schour and Massler, 1947).

Thus, the original thesis that sugar restriction will markedly reduce the rate of caries activity has been found to be correct on the basis of experimental findings obtained from large

numbers of individual clinical cases and from large population groups living under war-time conditions.

Sugar Consumption in the United States. The average American enjoys what is popularly known as a "sweet tooth" but which is in reality a perverted sugar appetite. It has been computed that the average individual living in the United States needs to consume approximately 40 pounds of sugar per year (10 tsps/day) in order to satisfy his caloric requirements completely. Starches and fats should contribute a significant proportion to the caloric intake of each individual. However, recent reports from the Department of Agriculture indicate that the average person in the United States consumed 93 pounds of sugar in 1948. This constitutes an excess of approximately 53 pounds of sugar per person over his nutritional and caloric requirements. The average child thus consumes his own weight in sugar every year. This constitutes a distinct aberration from the balanced diet.

Annual Consumption of Sugar in the United States	93 lbs./person
Maximum Nutritional Requirements / Year (Sedentary person to active laborer)	25-40 lbs./person
SUGAR CONSUMED IN EXCESS OF NEEDS	53-68 lbs./person

It is primarily this excessive sugar intake which causes the damage seen in caries-rampant mouths. The 53 pounds of excess sugar cannot be consumed at mealtimes, but is ingested in the form of candies, cakes and sodapop *between meals.* Excessive sugars are consumed *BETWEEN-MEALS.* Table 5 indicates the enormous amount of sugars contained in between-meal sweets. For example, the average chocolate bar contains from 5 to 7 teaspoonfuls of sugar.

Effects of Excessive Sugar Intake. Excessive sugar intake between meals constitutes a hazard not alone to the health of the teeth. It also is an important factor in creating the widespread obesity frequently seen in this country. Between-meal sugars are also an important contributory factor, especially in children, towards the loss of appetite with the result that other necessary foodstuffs, such as meats and vegetables are not eaten at mealtimes. The common complaint by parents that their children have no appetite at mealtimes may often be traced directly to the enormous consumption of refined sugars (candies and cookies) before mealtime. In this way, excessive sugar consumption predisposes to malnutrition since it literally pushes out from the diet the necessary proteins, minerals and fats. When between-meal sweets are removed from their diets, the children's appetites increase greatly and their nutrition is markedly improved. It is not at all unusual to see a youngster who has consistently failed to gain weight suddenly show a significant weight gain after the elimination of between-meal sugars.

Sugar Ingestion Habits and Caries Attack Rates. Every episode which includes the ingestion of refined sugars constitutes a single acute attack of caries since these refined carbohydrates are broken down and metabolized into acids upon the surface of the tooth with extraordinary rapidity. The pH on the surface of the tooth drops from 7.0 to 5.0 within one and one-half minute of the ingestion of a sugar (Stephan, 1943). It takes almost an hour before the pH is again returned to neutrality (Fig. 5). If a person were to consume sugars only at mealtime, the acid formation could very well be neutralized by the buffering action of the saliva and the neutralizing action of concomitantly ingested alkaline foodstuffs. However, when refined sug-

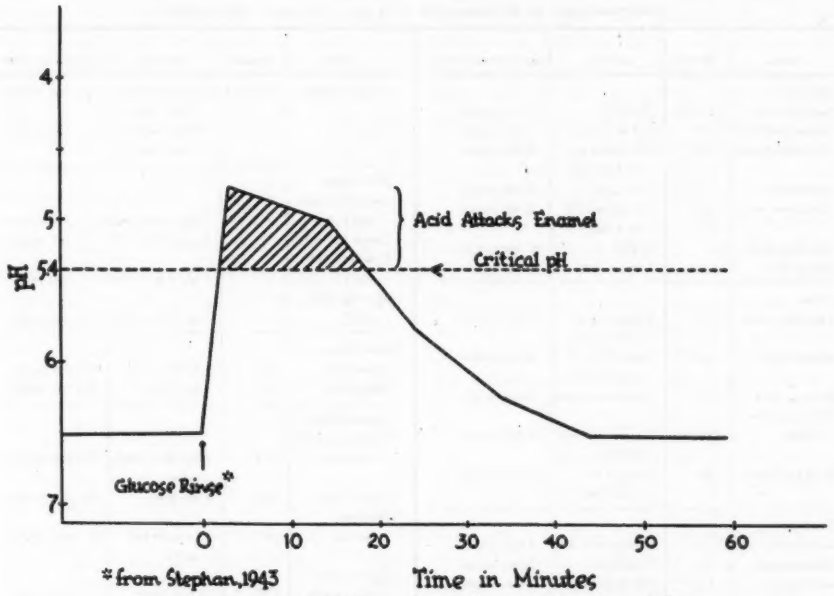

FIGURE 5. *Rate of Acid Formation Following Ingestion of Sugar*

ars are ingested *between meals and at frequent intervals,* the teeth are subjected to an almost continuous series of assaults by acids formed on the tooth surfaces (Fig. 6). The caries attack rate thus becomes enormously increased by the habitual consumption of sugars between meals.

Actually it is not so much the total quantity of sugars consumed during one day that is important but the *number of times* sugar is ingested. Thus 20 teaspoonfuls of sugar consumed at one sitting (e.g., during the course of a meal) are much less injurious to the teeth than 5 teaspoonfuls consumed four times a day in the form of between meal sweets. The latter produces four separate carious attacks; the former, only one.

Educational Program. The success of the sugar control program depends upon the active cooperation of the patient. The patient's cooperation in turn depends upon his understanding of the significance of sugar in the diet. The relationship of fermentable carbohydrate to caries activity should be explained to him in simple terms. Use a simple descriptive phrase such as "The sugars change to acids which decay the teeth." Make it clear to him that the best way to stop this process is to eliminate the sugar. In dealing with children both the parent and child must understand the diet. Let them learn by filling out a complete diet sheet for one week. Review this sheet with them, encircling in red those items which are high in sugar. Encourage them to help in revising the diet. Most patients cannot easily stifle their sugar appetite and will lie in order to gratify it. Demanding that the patient immediately stop eating all sugars will not produce as good cooperation as

Approximate Refined Carbohydrate Content of Popular Foods Expressed in Amounts Equivalent to Teaspoonfuls of Sugar[1]

(100 grams sugar = 20 teaspoonfuls = ½ cup = 3½ oz. = 400 calories)

food	amount	serving	sugar equivalent
Candies:[2]			
Hershey bar	61 Gm.	(5c size)	7 tsp. sugar
Chocolate cream	13 "	(35 to 1 lb.)	2 tsp. sugar
Chocolate fudge	30 "	1½ inches sq. (15 to 1 lb.)	4 tsp. sugar
Butterscotch	5 "	1 x 1 inch	1 tsp. sugar
Chocolate mints	22 "	1 medium (20 to 1 lb.)	3 tsp. sugar
Chewing gum		1c stick	½ tsp. sugar
Life saver		1 usual size	⅕ tsp. sugar
Cake:			
Chocolate cake	100 "	2 layer icing (1/12 cake)	15 tsp. sugar
Angel cake	45 "	1 po. (1/12 of large cake)	6 tsp. sugar
Sponge cake	50 "	1/12 of aver. cake	6 tsp. sugar
Cream puff (iced)	80 "	1 aver. custard filled	5 tsp. sugar
Doughnut, plain	40 "	3 inches in diameter	4 tsp. sugar
Cookies:			
Macaroons	25 "	1 large or 2 sm.	3 tsp. sugar
Gingersnaps	6 "	1 medium	1 tsp. sugar
Molasses cookies	15 "	3½ inches in diameter	2 tsp. sugar
Brownies	20 "	2 x 2 x ¾ in.	3 tsp. sugar
Custards:			
Custard, baked		½ cup	4 tsp. sugar
Brown Betty	130 "	½ cup	9 tsp. sugar
Gelatin		½ cup	4 tsp. sugar
Junket		½ quart	3 tsp. sugar
Ice Cream:			
Ice cream		½ quart	5 to 6 tsp. sugar
Water ice		½ quart	6 to 8 tsp. sugar
Pie:			
Apple pie		⅙ of med. pie	12 tsp. sugar
Cherry pie		⅙ of med. pie	14 tsp. sugar
Custard, cocoanut pie		⅙ of med. pie	10 tsp. sugar
Raisin pie		⅙ of med. pie	13 tsp. sugar
Pumpkin pie		⅙ of med. pie	10 tsp. sugar
Sauce:			
Chocolate sauce	30 "	1 tbsp. thick, hp.	4½ tsp. sugar
Marshmallow	7.6 "	1 aver. (60 to 1 lb.)	1½ tsp. sugar
Spreads:			
Jam	20 "	1 tbsp. level or 1 hp. tsp.	3 tsp. sugar
Jelly	20 "	1 tbsp. level or 1 hp. tsp.	2½ tsp. sugar
Marmalade	20 "	1 tbsp. level or 1 hp. tsp.	3 tsp. sugar
Syrup, maple	20 Gm.	1 tbsp. level or 1 hp. tsp.	2⅓ tsp. sugar
Honey	20 "	1 tbsp level or 1 hp. tsp	3 tsp. sugar
Milk Drinks:			
Chocolate (all milk)		1 cup, 5 oz. milk	6 tsp. sugar
Cocoa (all milk)		1 cup, 5 oz. milk	4 tsp. sugar
Cocomalt (all milk)		1 gl., 8 oz. milk	4 tsp. sugar
Eggnog (all milk)		1 gl., 8 oz. milk	4½ tsp. sugar
Soft Drinks:			
Coca-Cola	180 "	1 bottle, 6 oz.	4⅔ tsp. sugar
Gingerale	180 "	6 oz. glass	3⅔ tsp. sugar
Cooked Fruits:			
Peaches, canned in syrup	10 "	2 halves, 1 tbsp. juice	3½ tsp. sugar
Sweet cider	180 "	6 oz. glass	4½ tsp. sugar
Rhubarb, stewed	100 "	½ cup sweetened	8 tsp. sugar
Apple sauce (no sugar)	100 "	½ cup scant	2 tsp. sugar
Prunes, stewed, sweetened	100 "	4 to 5 med., 2 tbsp. juice	8 tsp. sugar
Dried Fruits:			
Apricots, dried	30 "	4 to 6 halves	4 tsp. sugar
Prunes, dried	30 "	3 to 4 med.	4 tsp. sugar
Dates, dried	30 "	3 to 4 stoned	4½ tsp. sugar
Figs, dried	30 "	1½ to 2 small	4 tsp. sugar
Raisins	30 "	¼ cup	4 tsp. sugar
Currants, dried	30 "	2 tbsp.	4 tsp. sugar
Fruits and Fruit Juices:			
Persimmons, fresh	100 "	½ cup	7 tsp. sugar
Fruit cocktail	120 "	½ cup, scant	5 tsp. sugar
Orange juice	100 "	½ cup, scant	2 tsp. sugar
Pineapple juice, unsweetened	100 "	½ cup, scant	2⅔ tsp. sugar
Grapefruit juice, unsweetened	100 "	½ cup, scant	2⅓ tsp. sugar
Grapejuice, commercial	100 "	½ cup, scant	3⅔ tsp. sugar

[1]Compiled from current publications on food values, courtesy of Dr. Hermann Becks, University of California.

[2]Candy runs from 75 to 85 per cent sugar. Popular candy bars are likely to weigh from 1 to 5 ounces and may contain 5 to 20 teaspoonfuls of sugar.

TABLE 5. *Approximate Refined Carbohydrate Content of Popular Foods Expressed in Amounts Equivalent to Teaspoonfuls of Sugar*

gradual elimination of between-meal sugars—item by item—and substitution of a non-cariogenic snack such as potato-chips or pop-corn. The principle of substituting a non-cariogenic piece of whole wheat bread and butter for the sweets will usually win the patient's confidence and rapport as well as achieve the necessary reduction in caries activity.

Indoctrination of the patient requires an educational program beginning with the first visit and continuing throughout the entire six weeks of the caries control period. Fifteen-minute wire recordings explaining the role of sugar in caries are excellent for patient education and save a great deal of time. Printed or mimeographed material is also effective—but you should first discuss the printed material with the patient, else it will not be read. If, after the patient thoroughly understands what he should do, he still does not cooperate, dismiss him. It is futile to attempt any further treatment with an uncooperative patient. It will not pay financially since any subsequent restorative program will break down sooner or later. Inevitably, the patient will blame the dentist (and not himself) when recurrent carious lesions appear. Non-cooperative patients are vociferous in their complaints about the holes in their teeth and their dentist. Such patients may injure a hard-won reputation. We have observed that non-cooperative patients suddenly change their attitudes when confronted with dismissal and frequently become very cooperative if given a second chance.

Judging Caries Activity. There are two reliable methods of testing the efficacy of the caries control program. The first is the use of caries activity tests such as the Lactobacillus acidophilus count or the Snyder test. The second is the change in the physical character of the carious dentin. There is one pitfall which must be avoided. Do not ask the patient or the parent whether or not the patient has been following instructions. The parent probably does not know and the patient will be reluctant to admit backsliding. As in any other disease, it is much safer to "ask the tissue" involved and to intelligently interpret the results of laboratory tests.

Caries Activity Tests. Caries activity tests are very helpful in determining the degree of caries activity in a given mouth. The Lactobacillus count is especially useful because of the apparent high correlation with caries activity (Bunting, 1925; Jay, 1936; Becks, Jensen, Millarr, 1944). The Snyder test (Snyder, 1940, 1941) is also effective and is simpler to use in the office if no laboratory facilities are available for Lactobacillus counts. Materials for this test are available commercially.* Whatever caries activity test is used, *saliva samples should be obtained on arising in the morning before brushing the teeth.* At least two tests should be run before caries control measures are actually instituted so that a base line of caries activity may be established. Subsequent weekly tests during the period of caries control will indicate—along with the clinical findings—the effcacy of the caries control program.

Examination of the Carious Dentin. Carious dentin in an active lesion is soft, light brown and necrotic. As caries activity is reduced, the physical character of the dentin changes. The carious dentin becomes harder and darker in color. If caries control measures are effective, these changes will be seen within ten days to two weeks.

Oral Hygiene

Artificial Cleansing. Definitive information on the effect of oral hygiene

* Difco Co., Detroit, Michigan.

TABLE 6

CARIES ACTIVITY TESTS

TEST	ACTIVE CARIES	UNDER GOOD CONTROL
Lactobacillus Count*	1000 to 2,000,000 or even more	Below 1000.
Snyder Test	Yellow color in 12 to 24 hours	No color change in 96 hours
Physical Character of the Dentin	Soft, necrotic, light brown color	Harder, darker color

* SUPPLIED free of charge from

Springfield Laboratory
IIllinois Department of Public Health
126½ North Fifth Street
Springfield, Illinois

Carbondale Branch Laboratory
Illinois Department of Public Health
Chautauqua and Oakland Streets
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Chicago Branch Laboratory
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325 East Broadway
East St. Louis, Illinois

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Illinois Department of Public Health
505 South Fifth Street
Champaign, Illinois

on caries activity has recently been obtained by Fosdick (1950). He showed that brushing the teeth immediately after each meal reduced the caries attack rate by 50-60%. Toothbrushing should therefore be encouraged after each meal where possible and immediately following the ingestion of any fermentable carbohydrate. It is important that good brushing technique be taught. If the patient requests recommendation of a dentifrice, a dibasic ammonium phospate-urea dentifrice and mouthwash may be suggested (Kesel et al, 1946). *When brush and dentifrice are not available, a plain mouthrinse with water will serve as an effective substitute.*

Natural Prophylaxis. While it is not always possible to brush the teeth immediately after eating, it is both practical as well as desirable to invoke the aid of the natural cleansing action of fibrous foods at the end of each meal. The patient should, therefore, be taught to eat celery, apples, a whole orange, or other fibrous food at the end of each meal. It is possible to show the patient the effectiveness of natural prophylaxis by a little demonstration. Apply a 2% aqueous mercurochrome solution to the surfaces of his teeth with a cotton swab to disclose the debris on the teeth. Have him brush one side of his mouth in the usual manner and examine the interproximal and cervical areas for the dye. Then tell the patient to eat a whole orange (cut into quadrants) on the opposite side and repeat the examination. The orange is usually a more effective cleanser than the poorly manipulated toothbrush.

Removal of Active Caries

Mechanical removal of the carious enamel and dentin is by far the most effective (and proved) method of caries control. Elimination of all active decay in the tooth makes that tooth surface caries inactive. This fact is often forgotten in the desperate search for the "pill" that will stop all decay.

Plan of Removal. In order to render the mouth caries inactive as rapidly as possible, all carious (infected) enamel and dentin must be removed. The procedure must be systematic. Complete one quadrant of the mouth each week during the six-week control period while educating the patient in sugar control and oral hygiene. No patient should be permitted to leave the chair with carious tissue still remaining in any tooth in the quadrant treated at that sitting. The surface with the smallest lesion should be opened first, the surface with the largest lesion last. This is done lest the operator leave the smaller lesions for another time.

Never begin the placement of permanent restorations before all the decay in all the teeth has been removed (and temporary fillings placed). It is not at all uncommon to see cases in which a beautiful restoration was placed on one tooth while the pulp of another was exposed by neglected caries.

Action of Eugenol. After removal of the carious tissue, temporary sedative fillings should be inserted. The temporary filling material of choice is a thick paste of zinc oxide and eugenol with the addition of a few cotton fibers to give it added strength and a small amount of clear rosin (and benzoic acid) to hasten the setting time (Grossman, 1939). This filling material is useful for four reasons:

1. *Antiseptic.* Prolonged contact with the eugenol in a well-sealed cavity effectively sterilizes the attacked dentin.

2. *Local Anesthetic.* Eugenol controls the pain that may result from removal of the carious dentin. The decayed dentin served as insulation over the sensitive dentin and pulp against air and saliva. Zinc oxide and eugenol paste is a much more effective insulation and in addition is sedative in action.

3. *Pulp Sedative.* Eugenol relieves the inflammatory condition of the pulp. It will not irritate the pulp and may in fact permit normal secondary dentin formation. Dentin and pulp treated with eugenol over a period of two to three weeks are comfortable and less sensitive to action of the bur.

4. *Hermetic Seal.* Zinc Oxide-eugenol is an effective seal. It prevents the entrance of oral fluids and bacteria into the cut dentin (Grossman, 1939).

Period of Restoration and Prevention

Restoration

After the caries progress has been brought under good control, permanent restorations may be considered. Of necessity, the control phase of the treatment has been time-consuming. In the four weeks remaining of the total treatment period, it is necessary to see the patient twice each week for eight office visits. During this time the entire mouth must be restored. In order to conserve time, each move in the restorative phase must be carefully planned in advance. The type of restorations used will depend upon the individual operator, but one of the determining factors in the selection of the restoration should be the minimal time required to restore the whole mouth, completely.

Multiple Inlay Techniques. For the

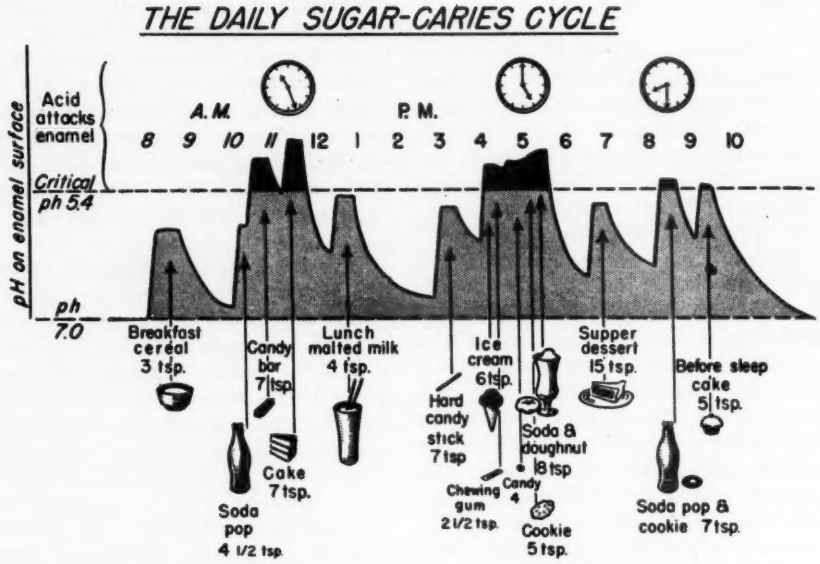
THE DAILY SUGAR-CARIES CYCLE
pH on enamel surface
Acid attacks enamel
Critical ph 5.4
ph 7.0
A.M.
P.M.
8 9 10 11 12 1 2 3 4 5 6 7 8 9 10
Breakfast cereal 3 tsp.
Candy bar 7 tsp.
Cake 7 tsp.
Soda pop 4 1/2 tsp.
Lunch malted milk 4 tsp.
Hard candy stick 7 tsp
Chewing gum 2 1/2 tsp.
Ice cream 6 tsp.
Candy 4
Soda & doughnut 18 tsp
Cookie 5 tsp.
Supper dessert 15 tsp.
Soda pop & cookie 7 tsp.
Before sleep cake 5 tsp.
Daily between-meal sugars ---- 60 1/2 teaspoons!!

FIGURE 6. *Round the Clock Caries Attack*

restoration of the posterior segments we have found that multiple inlay techniques are most satisfactory, especially in the primary dentition. They are rapid yet when properly done will meet the requirements of the most exacting operator. Where indicated, modified slice-box inlay preparations may be used for primary teeth (Barishman, 1937; Hogeboom, 1937; Brauer et al, 1947). At each sitting the posterior teeth of one quadrant are prepared for inlays. It is not necessary to remove all the zinc oxide-eugenol cement. The material makes an excellent cement base when it is fully hardened.

Banded Amalgam Crown. The banded amalgam crown may be used for primary or permanent teeth which are so badly broken down that it is impossible to get retention for the slice-box inlay. It serves all the functions of a non-abutment full cast crown and requires very little time to construct. It is a durable, strong and sanitary restoration (Massler and Frankel, 1949).

Other Restorations. Anterior teeth are restored with restorations appropriate to the existing situation. If teeth must be extracted, space maintainers should be placed if they are indicated. Permanent prostheses may be inserted at a later date. Pulpotomy and pulpectomy techniques are advised in teeth whose pulps have been exposed.

This is the only reason to prolong the treatment period. All permanent restorations should be completed within eight visits.

Topical Fluorides

It is not enough to control the disease and to repair the damage. One must *prevent* a recurrence of the at-

tack if at all possible. It would be remiss to discharge the patient without making certain that the entire process will not be repeated within the coming year. Low caries activity as judged by lowered Lactobacillus counts may be expected for some time after the sugar control regimen has been discontinued (Jay, 1947). However, it is wise, in cases with rampant caries, to continue the sugar control regimen for as long as possible.

Further steps, however, must be taken to insure against recurrence of rampant decay. Topical fluorides are not a guarantee, but they are an insurance policy against the initiation of additional enamel caries. There is abundant clinical evidence that the topical application of fluorides does prevent the initiation of caries in 40% of the teeth to which it is applied. It is, therefore, essential to apply topical fluoride during the period of restoration at each sitting for a total of four to six applications. These should be done in the manner recommended by the United States Public Health Service (Knutson, 1948). It is important *not* to apply the fluoride solution on *open cavities*. Penetration of fluoride ions into the pulp may cause inflammation and possible death of this tissue (Rovelstad and St. John 1949).

Frequent Check-ups. The rampant caries patient should be checked at monthly intervals for evidence of new caries by clinical examination, bite-wing x-rays, and caries activity tests. During this time he should be retained on the low sugar diet. If caries activity remains low for three months, increase the period between check-ups to three months. Topical fluoride application should be repeated at yearly intervals or whenever new teeth erupt.

Length of Control. The question is frequently asked, "How long should active caries control be continued?" It is advisable to keep the individual who has experienced rampant caries on a control program until it is certain that he is past the periods of acute exacerbation (4-8 and 11-18 years). A patient who is once susceptible to rampant caries, must be assumed to be always susceptible. This patient is never completed. He must be placed on frequent recall and the caries control program must be re-initiated at the earliest indication of a flare-up.

Summary and Conclusions

The treatment of rampant caries is a challenge to the best skill and background of the dental practitioner. This explosive, mutilating process affects at least 5% of the teen-age population destroying even those teeth which are ordinarily immune to decay. The disease can be successfully controlled only by the elimination of between-meal sugars and cleansing the teeth after every meal. Restoration of the affected surfaces can be planned and executed only after the rate of caries progress has been slowed down to within normal limits—or better, completely arrested, as indicated by Lactobacillus counts. Prevention of the initiation of new lesions can be effected by topical fluoride applications. The entire program of caries control, dental restorations, and caries prevention can be completed within a period of ten weeks by careful planning, in advance.

Six weeks (one visit per week) are devoted to arresting decay by (1) sugar control, (2) oral hygiene and (3) removal of active decay. Four weeks (two visits per week) are allotted for restorations and topical applications of sodium fluoride.

The necessity for a methodical approach to the management of this condition and the importance of the active cooperation of the patient in successful treatment cannot be over-emphasized.

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BIBLIOGRAPHY

Barishman, H.: Box-Gingival Slice Preparation for Gold Inlays, D. Items of Interest *59*:644-653 (July) 1937.

Becks, H., Jensen, A. L., and Millarr, C. B.: Rampant Dental Caries: Prevention and Prognosis, J. A. D. A. *31*:1189-1200 (Sept.) 1944.

Bunting, R. W., and Palmerlee, Faith: The Role of Bacillus Achidophilus in Dental Caries, J. A. D. A. *12*:381-411 (April) 1925.

Brauer, J. C., Higley, L. B., Massler, M., and Schour, I.: Dentistry for Children, Philadelphia, Blakiston Co., 1947, pp. 4, 319, 320.

Fosdick, L. S.: The Reduction of the Incidence of Dental Caries. I. Immediate Toothbrushing with a Neutral Dentifrice, J. A. D. A. *40*:133-143 (Feb.) 1950.

Gottlieb, B.: Dental Caries: Its Etiology, Pathology, Clinical Aspects and Prophylaxis, Philadelphia, Lea and Febiger, 1947, p. 171.

Grossman, Louis I.: A study of Temporary Fillings as Hermetic Sealing Agents, J. D. Res. *18*:67-71 (Feb.) 1939.

Hogeboom, F. E.: Is Teen-age Caries an Endocrine Problem? J. A. D. A. and D. Cosmos *24*:422-428 (March) 1937.

Hollander, F., and Dunning, J. M.: A Study by Age and Sex of the Incidence of Dental Caries in over 12,000 Persons, J. D. Res. *18*:43-60 (Feb.) 1939.

Jay, Philip; Hadley, F. P., Bunting, R. W., and Koehne, M.: Observations on Relationship of Lactobacillus Acidophilus to Dental Caries in Children during Experimental Feeding of Candy, J. A. D. A. *23*:846-851 (May) 1936.

Jay, Philip: The Reduction of Oral Lactobacillus Acidophilus Counts by the Periodic Restriction of Corbohydrates, Am. J. Orthodont. and Oral Surg. *33*:162-184 (March) 1947.

Jay, Philip: The Effect of Substrate on the Oral Flora, J. A. D. A. *37*:416-418 (Oct.) 1948.

Kesel, R. G., O'Donnell, J. F., Kirch, E. R., and Wach, E. C.: The Biological Production and Therapeutic Use of Ammonia in the Oral Cavity in Relation to Dental Caries Prevention, J. A. D. A. *33*:695-714 (June) 1946.

Klein, Henry; Palmer, Carroll E., Knutson, John W.: Studies on Dental Caries I. Dental Status and Dental Needs of Elementary School Children, Pub. Health Rep., Vol. 53, No. 19, May 13, 1938.

Klein, Henry; and Palmer Carroll E.: Studies on Dental Caries. IX. The Prevalence and Incidence of Dental Caries Experience, Dental Care, and Carious Defects Requiring Treatment in High School Children, Pub. Health Rep., Vol. 55, No. 28, July 12, 1940.

Klein, Henry; and Palmer, Carroll E.: Studies on Dental Caries. XII. Comparison of the Caries Susceptibility of the Various Morphological Types of Permanent Teeth, J. D. Res. *20*:203-216 (June) 1941.

Knutson, J. W.; Klein, Henry; Palmer, Carroll E.: Studies on Dental Caries, VIII. Relative Incidence of Caries in the Different Permanent Teeth, J. A. D. A. and D. Cosmos 25:1923-1934 (Dec.) 1938.

Knutson, J. W., and Armstrong, W. D.: The Effect of Topically Applied Sodium Fluoride on Dental Caries Experience. III. Report of Findings for the Third Study Year, Pub. Health Rep. *61*:1683, 1946.

Knutson, J. W., and Armstrong, W. D.: An Evaluation of the Effectiveness as a Caries Control Measure of the Topical Application of Solutions of Fluorides, J. D. Res. *27*:-340-357 (June) 1948.

Krohn, C., and Pedersen, P. O.: Decrease in the Incidence of Dental Caries in Six to Seven Year Old Copenhagen Elementary School Children, 1936-1943, Acta odont. Scandinav. *6*:130, 1945.

Massler, Maury: Teen-age Caries, J. Den. Children 12:57-64 (Third Quarter) 1945.

Massler, Maury; and Frankel, John M.: The Banded-Amalgam Crown, J. Den. Children *16*:1-3 (Fourth Quarter) 1949.

Massler, Maury: Prevalence of Rampant Caries in Teen-Age Children, Unpublished data.

Noyes, F. B., Schour, I., Noyes, H. J.: A Textbook of Dental Histology and Embryology, ed. 5, Philadelphia, Lea and Febiger, 1938, p. 329.

Rovelstad, Gordon H., and St. John, William E.: The Condition of the Young Dental Pulp after the Application of Sodium Fluoride to Freshly Cut Dentin, J. A. D. A. *39*:-670-682 (Dec.) 1949.

Schour, Isaac; and Massler, Maury: Dental Caries Experience in Postwar Italy, J. A.-D. A. *35*:1-6 (July) 1947.

Sloman, Ernest: Sex and Age Factors in the Incidence of Dental Caries, J. A. D. A. *28*:-441-444 (March) 1941.

Slack, Geoffrey L.: Vital Pulpotomy in Treatment of Fractured Incisors: Preliminary Report, British Dental Journal *85*:169-175 (Oct.) 1948.

Snyder, M. L.: A Simple Colorimetric Method for the Estimation of Relative Numbers of Lactobacilli in the Saliva, J. D. Res. *19*:-349-355 (Aug.) 1940.

Snyder, M. L.: A Simple Colorimetric Method for the Diagnosis of Caries Activity, J. A.-D. A. *28*:44-49 (Jan.) 1941.

(Continued on page 439)

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(CITY AND STATE)

PRESIDENT'S PAGE

by Walter J. Gonwa, D.D.S.

Dental Practice in Smaller Communities

We are all aware of a great field for dentistry in both the city and the smaller community, each having its good and bad points.

This article is in no way discriminating against city practice, but for years the trend has been for more young graduates to locate in the cities rather than the smaller communities. While this situation has improved somewhat, there still is not an equitable distribution of dentists between cities and smaller towns. With this thought in mind, I will try to point out the advantages of a practice in a smaller community.

During World War II a meeting of Society officers and committee chairmen was held in Springfield, the purpose being to discuss ways and means of increasing the amount of dentistry for the people of the state. The agenda included such topics as accelerated programs to increase the number of dental graduates annually, and an equitable distribution of dentists over the state. At that time an unflattering remark was made concerning the small town practice. The inference was questioning the demand for good dentistry in the small town, and the ability of the resident of the small community to pay for it. This is not true, and generally speaking, never has been the case. These people are dental health conscious and willing to pay for value received. They recognize good dentistry and appreciate the necessity of early care of the teeth.

The young dentist, who chooses a small community for his practice, will find the people filled with pride in what they have to offer in the way of a future home. With a limited population they strive to progress as rapidly as possible. They will always be willing to advance, and support progressive measures for the betterment of their community. A friendly, "let me help you" attitude exists. The residents of the small community are progressive and most helpful to each other.

The small town offers a greater opportunity for closer contact, a better chance for the new dentist to become acquainted and a better opportunity for the work of the dentist to become known. With the civic clubs active as they are at the present time, and the school hygiene programs endorsed in many of the smaller cities, a young man would find it well worth his time and energy, as well as satisfying, to become a part of a small community.

Practice in a small community presents a different picture now than it did thirty years ago. There are many factors which have caused this decided improvement. With the hard road systems all over the state, we are not isolated as we were in the past. With better traveling conditions it is possible

to attract patients from a much larger area, and easier to commute to and from cities and other places of interest in a short time.

With the radio and, now, television we are kept up to the minute on all news and entertainment, the same as any resident in the larger cities. Our schools have continued to improve over the years with such added attractions as supervised playgrounds and modern gymnasiums featuring all forms of athletics. Much has been done through the radio, the press, the fine work of the dental division of our health department, the county nurses, parent teachers associations and the individual dentist to impress upon the people the advantage of taking care of their teeth. The people demand good dentistry, and are willing to pay for good dental service.

In my own little community of eleven hundred people we have two banks with deposits of over four million dollars. It is a rich farming community. There are many such places throughout the state.

The fee schedule in the small community has improved. Lectures in dental economics, meetings of dentists where fees have been discussed and a general exchange of price ideas have been responsible for this improvement. In the past these discussions were considered, by many, to be unethical, but today they serve as a guide to co-operation among members of the profession. It has been a factor in bringing the fees of the smaller community dentist in accord with the fees of the general practitioner of the large city. When the difference in overhead expense is considered, it is doubtful if there is much difference in the net gain.

There may not be a G. V. Black, Brophy, Logan, or Coolidge practicing in a small community. However, I am not to sure but what some of these fine men did not originally come from a small community. I recall men over the state, in cities and small towns, who have been unceasingly active in establishing dentistry on its present high level. Their part in the advancement of the profession has been unlimited.

I have seen the type of work all dentists are doing, and the results of their efforts are a credit to the society. A few months ago I was in the Chicago office of one of our society members. I watched him fill a root canal and it was one of the most complete and accurate pieces of work of this type I have ever seen.

There is splendid co-operation between the members of the society, and this co-operation is most helpful to all of us in solving our problems. The time must never come when that feeling of co-operation is no longer in existence.

I would like to repeat to the young graduates, who will be looking for places to practice in the future, that there are great opportunities wherever they decide to locate. Due to the shortage of dentists downstate, and for the reasons I have mentioned, I hope many will consider some of the smaller communities before making a definite decision on location.

Let us all continue to conduct our practices, and lives, in such a manner that we will be a credit to a valuable profession. There is a place for every one of us in this old world, and there is a job for every one to do. Let it be said that this will be a job well done.

EDITORIALS

Summer's End

Summer's end is one of the most unhappy times of the year for most of us. It means that vacation time is over for about 365 long days. However, if we have had a good vacation, we are ready physically and mentally for a year of work. For many of us a kind of New Year's Resolution might be in order—to work less hard and long until our next vacation period. We are all inclined to forget what a nerve wracking business this dentistry is—and how much it takes out of the hide of the operator.

Society Officers Take Note

We are coming into a new dental year. In most types of business January is the beginning of the year, but in dental society work, October is usually year's beginning. For the officers of dental societies this means a lot. Now is the time to do a little work on planning, so that the rest of the year will be less hard and more successful.

After talking to many officers of societies through the years a few basic principles for running the dental society successfully have evolved. Some of them are mechanical and open to all; others are more difficult and not readily available.

First, the meeting dates for the whole year should be set up and announced to the membership. Some societies even print little stickers with the society name, date and place of meeting printed on them. These stickers are mailed to the membership with the first meeting announcement, and are to be placed in the appointment book. As simple a gimmick as this will help attendance.

Second, plan to send announcements of your meetings well in advance of the date—three weeks seems to be necessary in Chicago because of the many competing meetings.

Third, have a good and practical program arranged for each meeting date. The news of a good program will spread, and will help attendance at your next meeting.

Well ahead of these pointers are a few basic things that any society can do to help itself. Large, active committees help all societies. A man on a committee, especially if he has attended one or more private committee meet-

ings, will be rather certain to attend the parent meeting; he has actually had a part in arranging the meeting and in running the society so he is interested. Having frequent committee reports is still another way to keep up interest. Of course the basic factor in good meeting attendance is the good program. We admit that this is difficult, especially for the smaller societies. However, the Study Club has a listing of available speakers and can be of assistance to any society looking for suggestions.

And now, a plug for our *Journal*. If you have a good speaker on your program why not forward his paper to the *Journal* for possible publication. All papers cannot be published, but many good papers are not printed only because they are not sent in to the *Journal*.

Component Society Editors

Now is the time—the time to start sending a monthly report to the *Journal* of the doings of your component society. Remember, each member is interested in the activities of other members. We are a rather closely knit group; men from Chicago have dental friends and schoolmates in Decatur; dentists in Springfield are glad to hear that friend Joe from Olney has a new office, or a new baby, or that he has been elected a director of the bank. The *Journal* would like to print reports of your meeting, but not of these alone; we would like a news item from your society for every month. Thanks a lot —ahead of time.—*Wm. P. Schoen, Jr., B.S., D.D.S., M.D.S.*

FIRST CLASS MAIL

27 July, 1951

Illinois State Dental Society
Peoria 2, Illinois

Gentlemen:

The businessmen of Stronghurst and the people of this community are very anxious to locate a dentist. There is not a dentist in the entire county and, therefore, this would be a good location for someone who wants plenty of patients with good pay.

The businessmen here will make available an apartment and an office for any young dentist who may be interested.

A reply would be appreciated.

Yours truly,
/s/ Harold L. Bock, M.D.
Stronghurst, Illinois

Editor's Note: *Stronghurst is an Illinois town of* 691 *people. However, this is not the whole story, as it has a thriving country population surrounding it with no dentists close at hand. The businessmen and general population seem very anxious to secure a dentist for this town. All these circumstances seem to make this a good opportunity for a young dentist.*

• • • • •

Amercian Dental Association
Chicago 11, Illinois
August 3, 1951

Honorable Walter F. George, Chairman
Committee on Finance
United States Senate
Washington 25, D.C.

Dear Senator George:

This letter is in response to the telegram of Miss Elizabeth Springer inviting the American Dental Association to submit for the record its views with regard to the amendment to H.R.4473,

"a bill to provide revenue," proposed by Senator Ives of New York on July 25.

Briefly stated, the purpose of this amendment is to provide a method whereby bona fide members of professional organizations can, to a certain extent, level off their lifetime earnings by postponing a portion of the income tax which would otherwise be levied upon their earned net incomes in any one year, until the funds upon which such tax would otherwise be levied would become available for personal use upon the retirement of the professional person.

Under the proposal a professional man could pay not to exceed ten per cent or $7,500, whichever is less, into retirement fund sponsored by his profession, during each of his earning years. This sum would not be subjected to income tax during the year in which it was paid into the fund, but would become taxable at the rates then current, when withdrawn after retirement by any of the methods proposed in the amendment.

In electing to serve his fellow-men in the field of personal health services, the dentist, like the physician, the lawyer, and other professional personnel, deliberately postpones the beginning time of his earning period until many years beyond the time when high school graduates first enter the employment market, and for a considerable time beyond the time when the four year college graduate becomes employable. Today no person can become a dentist until at least six years after his graduation from high school and in most instances this time is postponed seven, eight or more years, depending upon the number of years he spends in college prior to entrance to dental school and in an internship or residency subsequent to graduation but prior to commencing practice.

During this period of preparation for his lifework the professional man is investing both actual cash for the cost of his education and subsistence and time when he might otherwise be accumulating funds in gainful employment. Subsequent to his entry into practice he passes through years of low income while attempting to establish a practice. After he is established he has a relatively few years of peak income, following which there is a rapid decline. In the case of dentists this income curve starts at about $3,000 annually at age 25, rises to slightly in excess of $9,000 in his early forties and then diminishes until it reaches the $3,000 point of beginning after he passes his sixty-fifth year. His death, in accordance with the statistics for most white males, will occur shortly after age 65. During his earning period, he must recoup the funds he has invested in his education, meet his ordinary living expenses and still find a way to provide for his old age and that of his widow.

During his earning lifetime the member of a learned profession is dependent solely upon the difference between his

gross and his net earnings for his sustenance. No special provisions favor him in providing for his old age. Unlike many of those employed by others, no one provides a pension fund for him and pays part of its cost. No friendly law guarantees him minimum income in the event his patients fail to patronize him, as is provded for the farmer whose market is depressed. No one pays him unemployment benefits in the event his business fails. By his own choice he is excluded from the benefits of Old Age and Survivors' Insurance.

His very independence make him more susceptible to the inherent inequities in our tax laws. It gives him the chance to make a varying income but it subjects him to the loss of a larger part of that income to the tax collector, viewed from the aspect of his total lifetime earnings, than is the lot of his fellow citizen who chooses to work for another. In his years of low income he pays as much tax as his neighbor; in his years of high income, the surtax sequesters a large part of his temporarily high earnings.

The Ives amendment offers a partial relief to the professionally self-employed. It does not absolve them of the total tax cost of years of abnormally high earnings, but it does serve to eliminate some of that burden and to postpone the remainder until that portion of the funds set aside under the provisions of the amendment actually become available as disposable personal income. The House of Delegates of the American Dental Association considered this problem in 1948 and adopted a resolution endorsing the principle of some form of tax relief for the professionally self-employed. The Council on Legislation has examined the proposal of Senator Ives and believes that it comes under the terms of that resolution. It therefore endorses the proposal as made.

The cost of the proposal, so far as dentists are concerned, would not be unduly high. As is shown by the attached table, the revenue lost to the government in any one year would be approximately $8,000,000 if every dentist availed himself of the benefits of the amendment to the maximum extent, a highly improbable occurrence.

The Council of Legislation, on behalf of the American Dental Association, respectfully requests the favorable recommendation of the Committee with regard to the proposed legislation.

Respectfully yours,

Paul E. Jones, D.D.S.
Member, Council on Legislation
American Dental Association

(*See next page for notes on dentists' incomes*)

MEAN NET INCOME OF SELF-EMPLOYED DENTISTS BY AGE GROUPS AS AFFECTED TAX-WISE BY THE IVES AMENDMENT TO H.R.4473

Age Group	No. of Dentists	Net Earned Income	Present Tax	Tax Under Amendment	Available For Fund	Tax Saving	Group Cost
Under 25	825	$3058	$270	$222	$306	$ 48	$ 39,600
25-29	10050	4868	553	476	487	77	773,630
30-34	10425	7480	762	660	748	102	1063,350
35-39	9525	9032	1042	880	903	162	1543,050
40-44	8325	9308	1090	924	931	166	1381,950
45-49	7950	8623	968	812	862	156	1240,200
50-54	8325	8307	910	762	831	148	1232,100
55-59	6825	7144	942	814	714	128	873,600

NOTES

Columns 2 & 3 derived from 1948 Survey of Dental Income by Department of Commerce.

Income tax amounts calculated by Bureau of Economic Research and Statistics, American Dental Association. Groups "under 25, 25-29 and 55-59" assume two tax exemptions; all others assume four tax exemptions.

Data on incomes of dentists over 60 excluded since that age is fixed for retirement under Ives amendment.

Total maximum cost to government in any one year, assuming above data and 1950 tax rates $8,147,480.

Gross tax savings to dentists on incomes ages 25 to 59, both inclusive, estimated at $4,743. Gross deposits in pension fund possible $27,576 during same period. Annual withdrawals over 15 year period after retirement if maximum contributed $1,838.40 plus share of earnings of pension fund.

Pennies have been disregarded in all examples and sums rounded to nearest dollar.

Important Announcement Directed To All Members

Recent action of the Executive Council of the Illinois State Dental Society has made possible a wider participation in the "Relief" benefits of our society. In order for this plan to secure maximum results, our components must meet the need for funds.

More than two-thirds of our members must have little understanding or appreciation of the dire need of our more unfortunate colleagues. Last year only 1740 of our 5231 members contributed to our Relief Fund through Christmas Seals.

Component society officers are urged to secure 100 per cent replies to 1951 Christmas Seals. Pride in our profession demands that we care for our own. We dare not do less—*John A. Zwisler, D.D.S., Chairman, Relief Committee.*

OBITUARY

JOHN P. O'CONNELL
1890-1951

Dr. John P. O'Connell of Lake Forest died in St. Luke's hospital, Chicago, in July. A graduate of Chicago College of Dental Surgery, Loyola University, in 1915, Dr. O'Connell had been a member of the Chicago Dental Society since 1917. He was also a member of the American Dental Association and the Illinois State Dental Society.

Surviving Dr. O'Connell are his widow, Vera, and a daughter, Mrs. Patricia Mueller.

ORVILLE C. TUCKER
1891-1951

Dr. Orville C. Tucker, practicing dentist of Joliet, passed away in Silver Cross hospital there on June 14. Dr. Tucker, who lived at 316 Richards St., and occupied offices in the Medical Arts Bldg. in Joliet, had been ill for the past three months.

A graduate of Northwestern University Dental School in 1928 Dr. Tucker had been in practice for 23 years. He was a member of the Illinois State Dental Society, through the Will-Grundy component, and of the American Dental Association.

Dr. Tucker is survived by his widow, Artie V. and a sister, Hazel, of Mannington, West Virginia. He was preceded in death by his daughter, the late Wynona Belle.

Funeral services were held for Dr. Tucker on June 16 in Joliet. Interment was at Fairmont, West Virginia.

WILLIAM GORDON LETTERMAN
1879-1951

Funeral services were held in St. Louis, Missouri, July 23 for Dr. William Gordon Letterman, 72, of University City, Missouri. Dr. Letterman died in his home July 19 as the result of a heart ailment. He retired three years ago, because of illness, after 44 years of continuous practice in East St. Louis, Illinois.

A native of Daffau, Texas, Dr. Letterman began the practice of dentistry in 1905 after graduation from the University of Michigan Dental School. Dr. Letterman was a Life Member of the East St. Louis, St. Clair District and the Illinois State Dental Societies, as well as of the American Dental Association. He was also a member of the St. Louis Zoological society.

Dr. Letterman was the son of William H. Letterman, founder of Phi Kappa Phi national fraternity, and the nephew of Jonathan Letterman, past Army surgeon-general, after whom Letterman General Hospital, San Francisco, was named.

Dr. Letterman is survived by his

widow, Mary R.; a son, Dr. George S., Washington, D.C. plastic surgeon, and a daughter, Mrs. Calvin Ellis, University City. Three grandchildren also survive.

GEORGE SCHNEIDER
1867-1951

Dr. George Schneider, 84, prominent LaSalle dentist, died July 15 following a stroke. Burial took place in Tonica on July 17.

Born in Granville in 1867, Dr. Schneider spent his early manhood on a farm in McLean county. A graduate of the Chicago College of Dental Surgery, Loyola University, in 1900, Dr. Schneider spent the first 20 years of his professional career in Chicago.

In 1920 Dr. Schneider moved to La Salle where he conducted his practice on the highest ethical plane. He was a former president and secretary of the LaSalle County Dental Society and past president of the now defunct Northern Illinois Dental Society. Dr. Schneider was also a member of the American Dental Association and a retired Life Member of the Illinois State Dental Society.

Like many other dentists Dr. Schneider had hobbies. Two that stood out were his desire to influence his profession to adjust its dental curriculum so that dental service could be rendered to all the children in America at a much lower cost than at present; another outstanding hobby was his writing. Among the publications in which Dr. Schneider's dental articles have appeared are American Dental Surgeon, the Bulletin of the Chicago Dental Society, the ILLINOIS DENTAL JOURNAL, the Journal of the American Dental Association, Dental Digest, Oral Hygiene and Dental Survey.

Dr. Schneider also was noted as a designer of dental instruments. In 1926 he was granted a patent for a set of surgical instruments designed to facilitate extractions.

On his eightieth birthday Dr. Schneider was honored with a gold medal in recognition of his services to dentistry by the La Salle County Dental Society.

Dr. Schneider is survived by his widow, Madeline, LaSalle, and a son, John, a teacher at Joliet High School.

—Hugh E. Black

COMPONENTS

PEORIA

The Peoria District Annual Picnic was held at Midway Duck Inn and was, as usual, a bang-up affair. The golfers played at the Lacon Country Club under ideal conditions, while trap shooters, horseshoe pitchers, bait casters, and ball players gathered at Midway Inn for probably the most complete arrangement of sports competition that the Society has enjoyed in many a year. Chairman Cliff Becherer is to be complimented on a highly successful and well organized day. There were prizes galore, and most everyone took one or more home. The sports were followed by heaps of fried chicken, french fries, and all the trimings.

Among the vacationers is W. R. Rodenhauser, who is spending a few weeks at his Canadian retreat. Your correspondent recently returned from Phelps, Wisconsin and a bout with the large mouth bass of that area. Bill Curtis and family are in Minocqua, Wisconsin, and the most regular vacationer in our district, Phil Chain, is just taking it easy around town for a couple of weeks. Mal Elson is also Northbound to Minocqua. Gene Mahle recently returned from a fine trip to Colorado.

News is scarce around Peoria in the summer—we are looking forward to our first meeting in September.

L. B. McEwen

MADISON

The Executive Council of the component met July 18, at the Edwardsville Gun Club. Attendance was not up to our usual "par" due to sickness and vacations, but the meeting was very successful. Plans for the Caravan Meeting September 24 are progressing very nicely according to reports of the various committees.

Guests at our last executive meeting were Father Dan Mahoney, of Boston, Mass., brother of Jim Mahoney; Dr. Val Eversgird, President of St. Clair Component Society, and Dr. Leo Conaty, Past President of St. Clair Component.

Our next Executive Council Meeting is set for September 12, at the Edwardsville Gun Club.

The Annual Fall Outing of the Madison component has been post-

News and announcements about the Component Societies and their members are solicited by the Editor of each society. Information should be sent directly to the component editor. The names and addresses of all editors are given in a directory in the back of the JOURNAL.

poned until Wednesday, October 24.

Dr. Harold Hudson and wife have just returned from a ten day vacation at Muskegon, Mich. They were delayed by high water and had to travel by plane from Chicago to Muskegon.

Dr. Walter Withoff and wife took an airplane trip to Mexico.

Dr. B. H. Klueg and family have spent a ten day vacation visiting Mrs. Klueg's father at Withee, Wis. They spent a few days fishing at North Sand Lake, near Spooner, Wis.

Dr. P. A. Ritter's new home is progressing and Phil expects to move in this fall.

Dr. C. A. Smith of Granite City moved to his new home recently.

Dr. Hal Worcester is now in the service. His address is Capt. Hal Worcester, 103 Med. Bn., 28th Inf. Div., Camp Atterbury, Indiana.

—B. H. Klueg

WARREN

Members of the Warren County Dental Society, with their wives, met at Niota the evening of July 31 to honor Dr. W. S. Phelps, Monmouth, who retired from the practice of dentistry. Before the chicken and fish testimonial dinner, Mrs. Phelps was presented with a corsage. After the dinner, Dr. H. W. Stott represented the society and presented a watch to Dr. Phelps, who has been a member of the Warren component society for 48 years. Dr. Phelps thanked the members of the society, and everyone joined in considerable reminiscing. Circumstances over which we had no control prevented us from attending this meeting, but we count Dr. Phelps as one of our nearest and dearest friends. We wish him every happiness in the future.

Perhaps our dental friends will be interested in a new book entitled "The New Science in the Treatment of Disease" published by G. B. Winrod, Wichita, Kansas. This book tells of treatment for various diseases by treating through the blood.—*H. W. McMillan.*

CHAMPAIGN-DANVILLE

Word has been received from the Champaign-Danville component society of a change in the meeting date for their regular semi-annual meeting. Since their prearranged date conflicts with the dates set for the American Dental Association meeting in Washington, D. C., the regular meeting of the Champaign-Danville District Dental Society is postponed one week. The meeting will be held on Thursday, October 25.

SOUTHERN ILLINOIS

On July 12, 1951 the Southern Illinois District Dental Society held its annual picnic at the Jackson County Country Club at Murphysboro. A short business meeting preceded the festivities of the day. At the meeting the president, Dr. W. E. Setzekorn, Mt. Vernon, reappointed all committees of the previous year to continue in the same capacity. It was decided to make the term-of-office of the component editor three years, in order to avoid confusion in changing office each year. Dr. J. W. Setzekorn, Mt. Vernon, retiring president, was selected as editor.

Some enthusiastic discussion was given concerning the Caravan Meeting September 24 at the Mounds Club near

Collinsville.

After a short warm-up of golf and shuffle board, a half fried chicken with all the trimmings made one of the best luncheons ever served at any picnic. Dr. and Mrs. Glen Ozburn and other Murphysboro dentists and wives deserve bouquets for a splendid job in making local arrangements so successful.

The afternoon was spent competing in various tournaments and contests. The golf tournament ended in a tie for Medalist, Dr. C. W. Elder, Eldorado, and Dr. G. W. Lambert, West Frankfort. Dr. K. Barger, Golconda, won the blind bogey and Dr. M. W. Carlton, West Frankfort, high gross. Dr. J. A. Langenfeld, Centralia, was low with handicap, with Dr. C. L. Wright, Carbondale, second and Dr. D. J. McCullough, Mt. Vernon, third.

The ladies golf tournament was quiet successful with Mrs. W. E. Leach, Medalist.

Mrs. C. W. Elder, Eldorado, was high in the Ladies Bridge tournament with Mrs. W. E. Setzekorn, Mt. Vernon, second high and Mrs. Nieber, Springfield, low. Mrs. C. L. Friend of Carbondale was high winner at canasta.

Taking advantage of the lake around the club house, and a great portion of N. 3 and No. 9 holes of the golf course, a bait-casting contest was held. Dr. Jack J. Setzekorn, Mt. Vernon, won first; Dr. J. F. Scott, Rosiclare, second; Joe Davidson, Mt. Vernon Laboratory, third, and Dr. E. R. Rosenberger, Murphysboro, fourth.

Dr. E. C. McKim and partner were winners in the men's shuffleboard tournament; Miss Pat Francovich and Miss Bruce, both assistants, were winners in the ladies' shuffleboard.

Attendance prizes were awarded to Mrs. J. J. Corlew, Mt. Vernon; Mrs. C. L. Wright, Carbondale; Mrs. John Fry, Mt. Vernon; and Mrs. Sam Hull, Evansville, Indiana.

All in all it was a very successful day, made possible by those in charge of the local arrangements, and the many Dental Supply Houses and Laboratories who most graciously contributed prizes.—*James W. Setzekorn*

DECATUR

There isn't any official business to report from the Decatur District until our regular meetings start in October. The various men planning these programs promise us an interesting year.

Decatur was well represented at the Eastern Illinois play-day at the Charleston Country Club, in July. Hal Friedinger, John Griffin, Paul Berryhill, Al Schiltz, Ike Staley, Walt Winter, Junior Goodwin, Carl Noel, the St. Louis tooth peddler, and this humble correspondent made the trip. Chairman Tym, assisted by Bachman from Mattoon, rounded up quite a few celebrities from the Illinois State Society's "Big Brass." This contingent was composed of Gonwa, Kesel, Clopper, La Due, and Clarno. Our own perennial celebrity and speaker extraordinary, Lloyd Dodd, had to cancel his reservation due to a slight indoor accident he suffered at a similar meeting in Springfield the week before. Those new hormone tablets have worked wonders for Grandpappy Dodd, but he still has to rest fourteen days between dental meetings. Some genius on the Eastern Illinois committee conceived the idea to have everyone attending speak a few words in a voice recorder, and then played the recording back for dinner entertainment. That sure rang the bell. You couldn't pry those amalgam merchants out of their chairs until they had admired the worlds finest voice, their own.

Lt. Col. Park Waggoner is off to the

Army again for an indefinite stay. This time he is battling dentures at Fort Sill, Oklahoma. R. J. Stengel, a local boy and recent graduate, is taking over Park's practice.

Wray Monroe and his dental records have just returned from a months vacation touring the south eastern coastline.

Dudley Wolfe spent his vacation working on his new country estate. He tried some fishing in the lake and reported a huge bass broke his line and got away. Since then Leo Reid has camped on the spot so much the neighbors think he is training for flag pole sitting, holding a casting rod.

Art Schaub has been in the hospital again. We understand he is better, and hope by the time this goes to press he will be back with us. Bill Meis was in the hospital under more happy conditions, he went out to greet his new son, Vincent, Bill's third boy; not a record, but something for our local "Father of Girls Club" to envy.

Bud Saunders has purchased a fine new home in the 1500 block on West Riverview.

Bill Tener is a proud father again, this time its five Boxer puppies. The automobile dealers bid against each other to take soft-touch Tener, he bought two new cars in five weeks.

Harold Foster has just returned from an extended fishing trip in Alaska. When the local boys heard his report on high dental fees up there, it almost started a mass migration to the northland.

Just so his public doesn't forget him, we will report the latest Berryhillisms. Paul celebrated his forty-eight birthday, still able to shoot golf in the seventies, and talked Byron Nelson into giving him a twenty-five dollar golf lesson for free. Professionally, he achieved even greater honors, a brilliant parliamentary move by his friend, Bill Hacker, won him an unopposed nomination and election to the coveted job as chief of the newly formed dental staff at Decatur and Macon County hospital.

This article is being edited in the beautiful month of August, dedicated to childrens examinations, amalgams, Sodium Fluoride, and mother's pleas of, "fix him up before school starts." In such an atmosphere I can't remember all my news. Anyone that feels neglected please call my office for prefered treatment next month.

—E. J. Douglas

Massler Bibliography

(*Continued from page* 424)

Sognnaes, R. F.: Analysis of Wartime Reduction of Dental Caries in European Children, Am. J. Dis. Child *75*:792-821 (June) 1948.

Stephan, R. M.: A Quantitative Method for Evaluating Physical and Chemical Agents Which Modify Production of Acids in Bacterial Plaques on Human Teeth, J. D. Res. *22*:45-51 (Feb.) 1943.

Toverud, G.: Decrease in Caries Frequency in Norwegian Children During World War II, J. A. D. A. *39*:127-136 (Aug.) 1949.

Toverud, G.: Dental Caries in Norwegian Children During and After the Second World War, J. Am. Dietet. A. *26* (*9*):673-680 (Sept.) 1950.

Food Balance Sheets, Food and Agriculture Organization of the United Nations, Bureau of Agricultural Economics, U. S. Dept. of Agriculture, April, 1949.

CURRENT NEWS

PAUL T. DAWSON APPOINTED LOYOLA OPERATIVE PROFESSOR

Dr. Paul T. Dawson is the newly appointed Professor of Operative Dentistry at Loyola University's Chicago College of Dental Surgery. Dr. Dawson replaces Dr. Warren Willman who has gone into private practice. This appointment was announced by Dean A. Raymond Baralt, Jr.

A graduate of Chicago College of Dental Surgery in 1928, Dr. Dawson received his Bachelor of Science degree from Loyola in 1940. Dr. Dawson resumed teaching duties at his alma mater this September; he had previously taught there from 1929 to 1945 before going into private practice.

ACADEMY OF PERIODONTOLOGY ANNOUNCES ANNUAL MEETING

The annual meeting of the American Academy of Periodontology will be held at the Mayflower Hotel, Washington, D.C., October 11, 12, 13, 1951, according to an announcement from Dr. Clarke E. Chamberlain, Peoria, secretary of the Academy. The meeting will immediately precede the annual session of the American Dental Association, October 15-18. Members of the American, Canadian and foreign dental socieites are welcome at the meeting of the Periodontology group.

NEW EDITOR ASSUMES FORTNIGHTLY POST

Marvin E. Chapin has taken over the important post of editor of The Fortnightly Review of the Chicago Dental Society. Dr. Chapin replaces James H. Keith, former editor, now president-elect of the Chicago Dental Society. Dr. Chapin, like Dr. Keith, limits his practice to oral surgery and exodontia.

Dr. Chapin graduated from Chicago College of Dental Surgery, Loyola University, in 1938. During 1938 and 1939 he interned at Forsyth Dental Infirmary for Children; the following two years were spent as resident in maxillofacial and plastic surgery at Cook County hospital. During World War II Dr. Chapin served as a combat flyer in the Army Air Corps, and after his return joined the teaching staff of his alma mater. Upon his retirement from teaching in 1950, Dr. Chapin was assistant professor of Oral Surgery and lecturer in Diagnosis and Anesthesia at Loyola.

His many years of lecturing and writing in oral surgery and exodontia and his teaching experience will serve Dr. Chapin well in his new editorial position.

Marvin E. Chapin, Editor, Fortnightly Review

A.D.A. DENTAL MISSION COMPLETES TOUR OF JAPAN

Dentistry in Japan is far below American standards, members of a U.S. dental mission reported upon their return August 7 from a 40 day inspection tour of Japanese dental installations. The mission, headed by Dr. Harold W. Oppice, Chicago, Association president, went to Japan at the invitation of the Japanese Dental Association and the Supreme Commander of the Allied Powers.

Harold W. Oppice, President, American Dental Association

In general, Dr. Oppice said, dental practice is more than a quarter of a century behind that in the United States. Japanese dentists, however, demonstrated an intense desire to improve dental practice in their nation, according to Dr. Oppice. A detailed report of the mission's findings has been prepared for SCAP and the A.D.A. Board of Trustees. In addition to Dr. Oppice, members of the mission were Dr. LeRoy M. Ennis, Philadelphia, president-elect of A.D.A.; Dr. R. C. Dalgeish, Salt Lake City, A.D.A. trustee; Dr. Stanley D. Tylman, Chicago, chairman of the Council on International Relations, and Dr. Geo. C. Paffenbarger, Washington, D.C., A.D.A. research associate at the National Bureau of Standards. Enroute to Japan, the A.D.A. officials met with members of the Alaska Territorial Dental Society at Anchorage and with members of the Hawaii Territorial Dental Society at Honolulu. During the trip, the mission traveled more than 20,000 miles by air.

NAVY NOW SEEKS VOLUNTEERS FROM PRIORITY ONE DENTISTS

The Navy announced during August that it has openings for 189 volunteers for immediate active duty from among the pool of dentists in priority one under the dentist-physician draft act. Previously, the Navy had refused to commission priority one dentists who had been enrolled in the A.S.T.P. Those dentists now accepted will be commissioned lieutenants (junior grade), and will be required to serve for two years. Both the Army and Air Force are continuing to grant reserve commissions to volunteers from priority one.

The armed forces reported last month that there had been an increase in the number of priority one physicians who were accepting commissions voluntarily, and that its August call for 333 physicians had been temporarily delayed. During July, when the armed forces called up 717 priority one physicians only two refused to volunteer, and were drafted as privates. Subsequently, they were offered commissions but they are not eligible for the $100 per month salary bonus paid to volunteers.

A.D.A. OFFICIALS DISCUSS HEALTH PROBLEMS OF U.M.T.

Dr. R. H. Friedrich, Plainfield, N. J., chairman of the A.D.A. Council on Federal Dental Services, and a group of A.D.A. representatives met with the National Security Training Commission at Washington, D.C., August 16

to discuss dental health and related problems regarding Universal Military Training. The Commission is now engaged in preparation of a plan for the operation of U.M.T. which is to be submitted to the Congress by the end of November. Provision for health care of the estimated 1,000,000 18-year-olds who would become subject to military training each year should U.M.T. be placed in operation is a major factor under consideration by the Commission. Mr. Herbert B. Bain, director, Bureau of Public Information at the A.D.A., and Mr. Bernard J. Conway, legislative assistant, A.D.A. Council on Legislation, accompanied Dr. Friedrich to the meeting.

A.D.A. officials met informally with representatives of the American Medical Association at A.D.A. headquarters in Chicago on August 15 to discuss common health problems relating to U.M.T. Participants included former A.M.A. president Roscoe Sensenich, South Bend, Ind., member, and Mr. C. Joseph Stetler, Chicago, secretary of the Council on Emergency Medical Service; Dr. Stockton Kimball, Buffalo, N. Y., chairman, and Dr. Francis Manlove, Chicago, member of the joint committee on Medical Education in Time of National Emergency; Dr. Harold W. Oppice, Chicago, A.D.A. president; Dr. Friedrich; Dr. Gerald Timmons, Philadelphia, Dean, Temple University Dental School; Dr. Harold Hillenbrand, A.D.A. secretary, and Mr. Francis J. Garvey, secretary, A.D.A. Council on Legislation.

CLASSIFIED ADVERTISING

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FOR SALE: Dental practice in West Central Illinois. Modern office, town of 3,000. Set-up is such that you cannot miss. Address I D J #90, The Illinois Dental Journal, 6355 N. Broadway, Chicago 40.

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FOR RENT: Dental office located at one of Chicago's busiest intersections on Northwest side. Well furnished reception room. Other offices in building rented to physicians. A terrific spot; reasonable rental. Contact Mrs. John DeVale, 1435 N. Lathrop Ave., River Forest, Illinois. Phone: Forest 9-6398.

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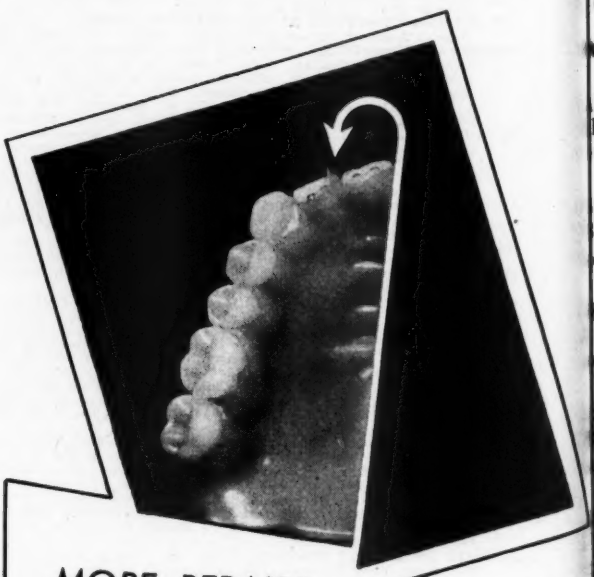

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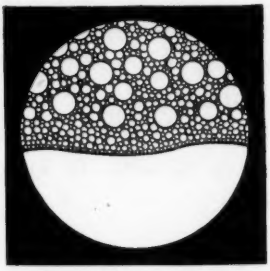

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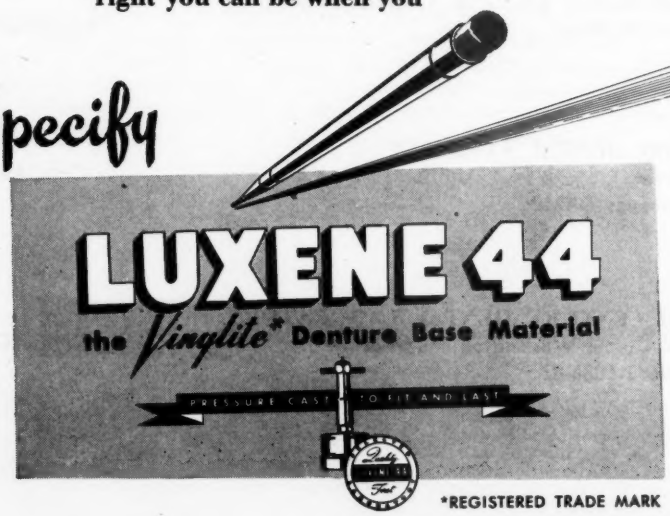

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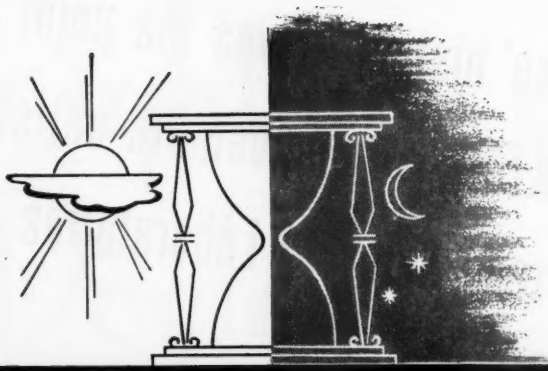

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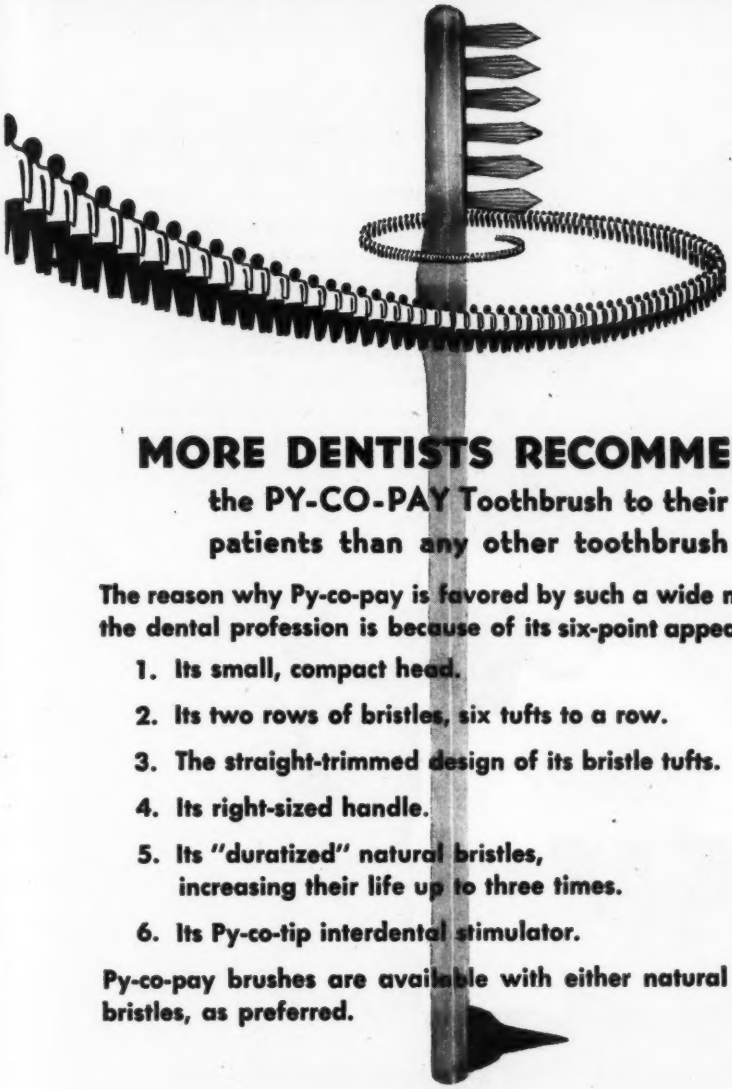

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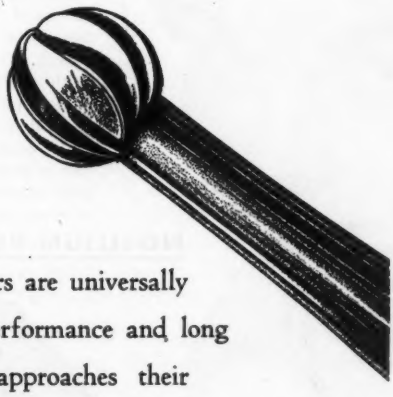

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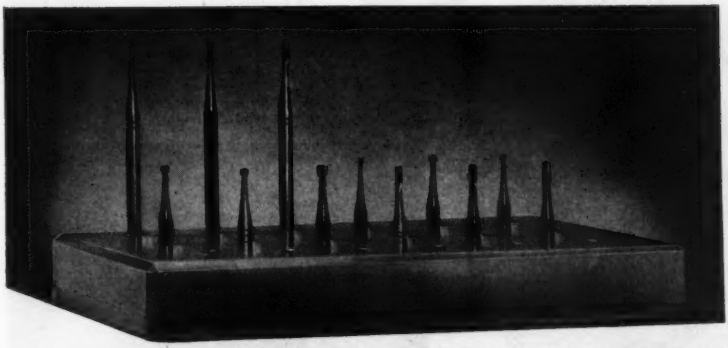

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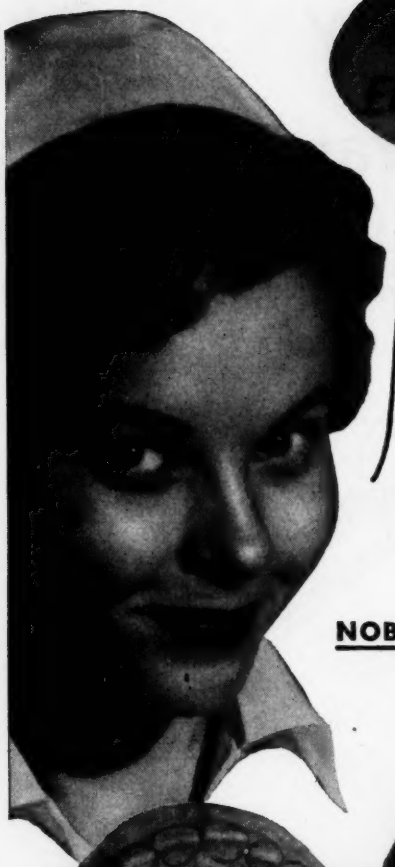

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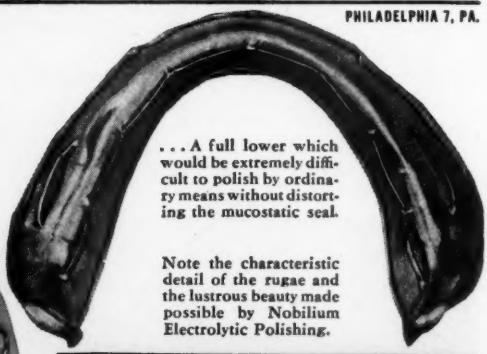

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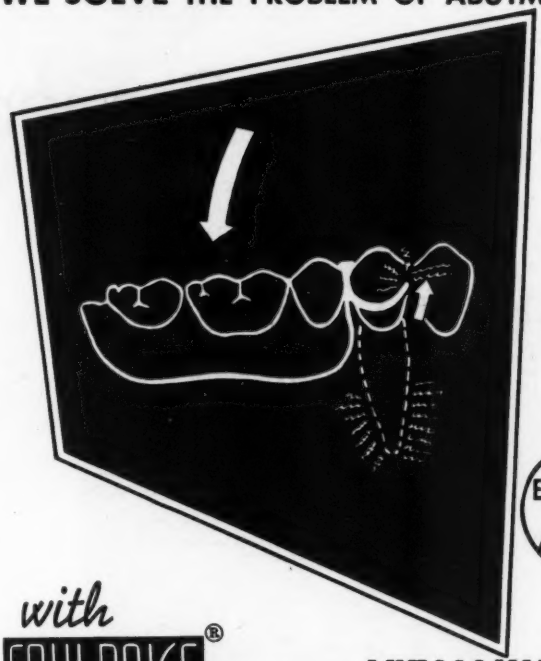

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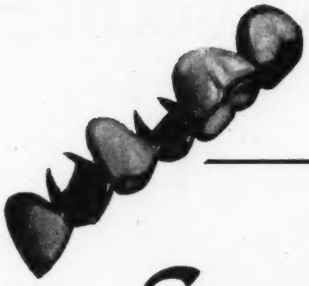

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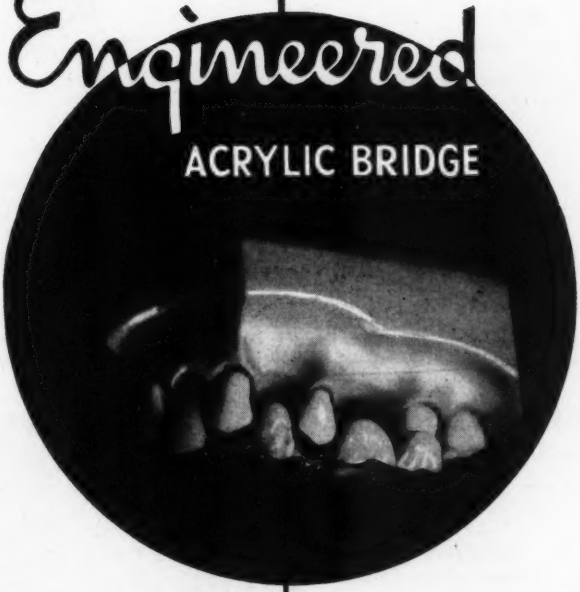

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